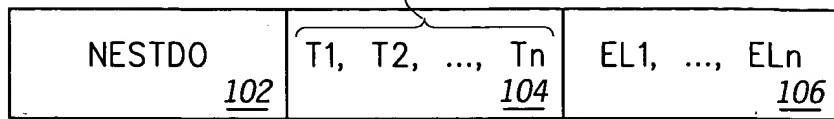


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100

103a, 103b, ..., 103n



NESTED LOOPING INSTRUCTION:

104

T1 = TERMINATION FIELD 1 - CONDITION TO
TERMINATE FIRST (INNERMOST) LOOP
T2 = TERMINATION FIELD 2 - CONDITION TO
TERMINATE SECOND LOOP
:
Tn = TERMINATION FIELD n - CONDITION TO
TERMINATE nth (OUTERMOST) LOOP

106

EL1 = END OF LOOP 1 - IDENTIFIES LAST INSTR IN 1ST LOOP
EL2 = END OF LOOP 2 - IDENTIFIES LAST INSTR IN 2ND LOOP
ELn = END OF LOOP n - IDENTIFIES LAST INSTR IN nth LOOP

FIG.1

EXAMPLE - CLEARING OUT A PORTION OF AN ARRAY

STANDARD DO LOOPS

```

CLR I
CLR J
DO #8, LOOPO
DO #4, LOOPI
CLR X[I][J]
INC J
LOOPI
INC I
LOOPO

```

202

210

NEW INSTR

```

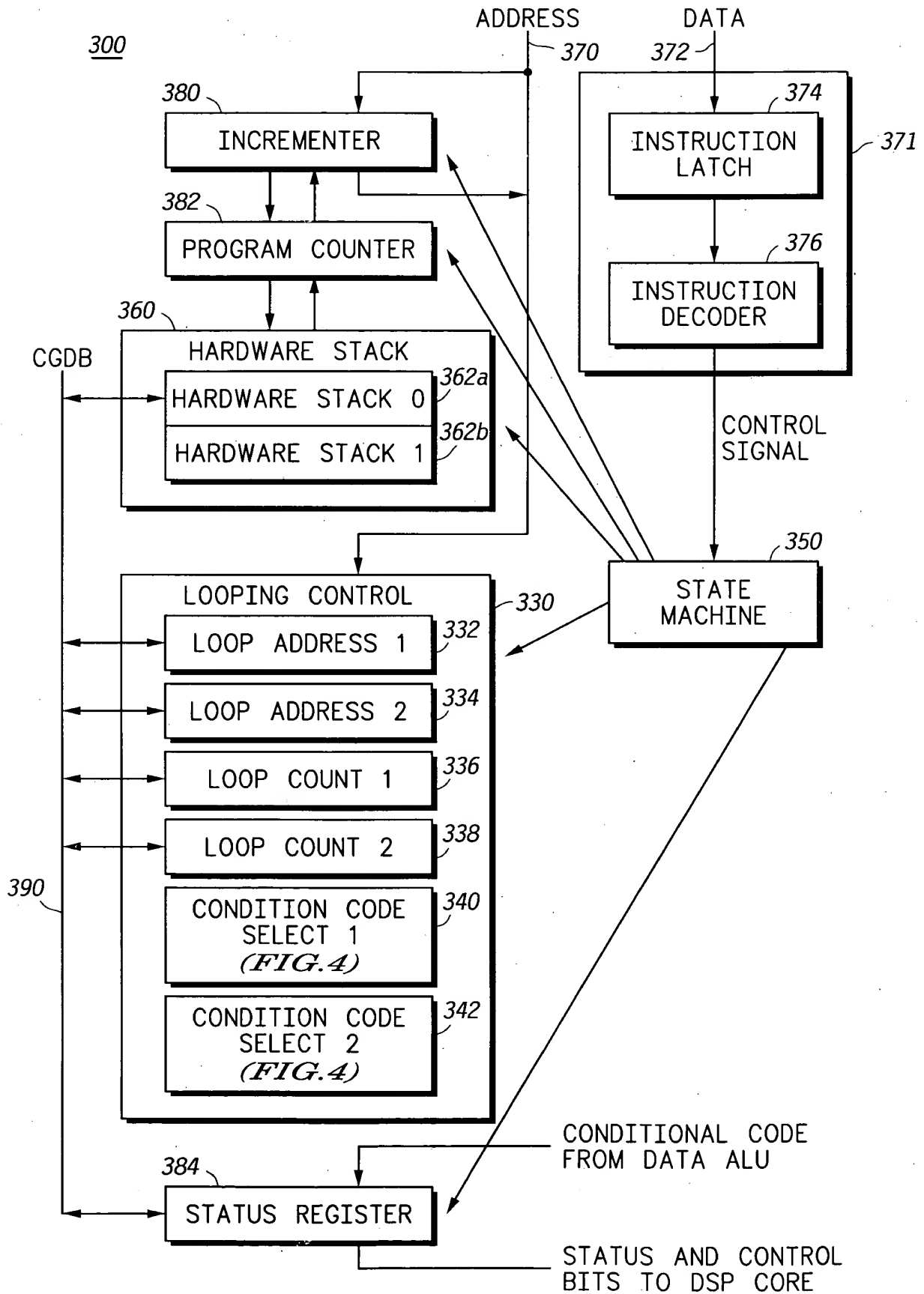
CLR I
CLR J
NESTDO #4, #8,
LOOPI, LOOPO
{ CLR X[I][J]
  INC J
}
LOOPI
INC I
LOOPO

```

FIG.2

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FIG. 3



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EXAMPLES OF CONDITION CODE TYPES		
ID	ENCODING	DESCRIPTION
CC	000	CARRY BIT CLEAR
CS	001	CARRY BIT SET
EQ	010	EQUAL
NE	011	NOT EQUAL
GE	100	GREATER THAN OR EQUAL
GT	101	GREATER THAN
LE	110	LESS THAN OR EQUAL
LT	111	LESS THAN

400

FIG. 4

09746978-12200

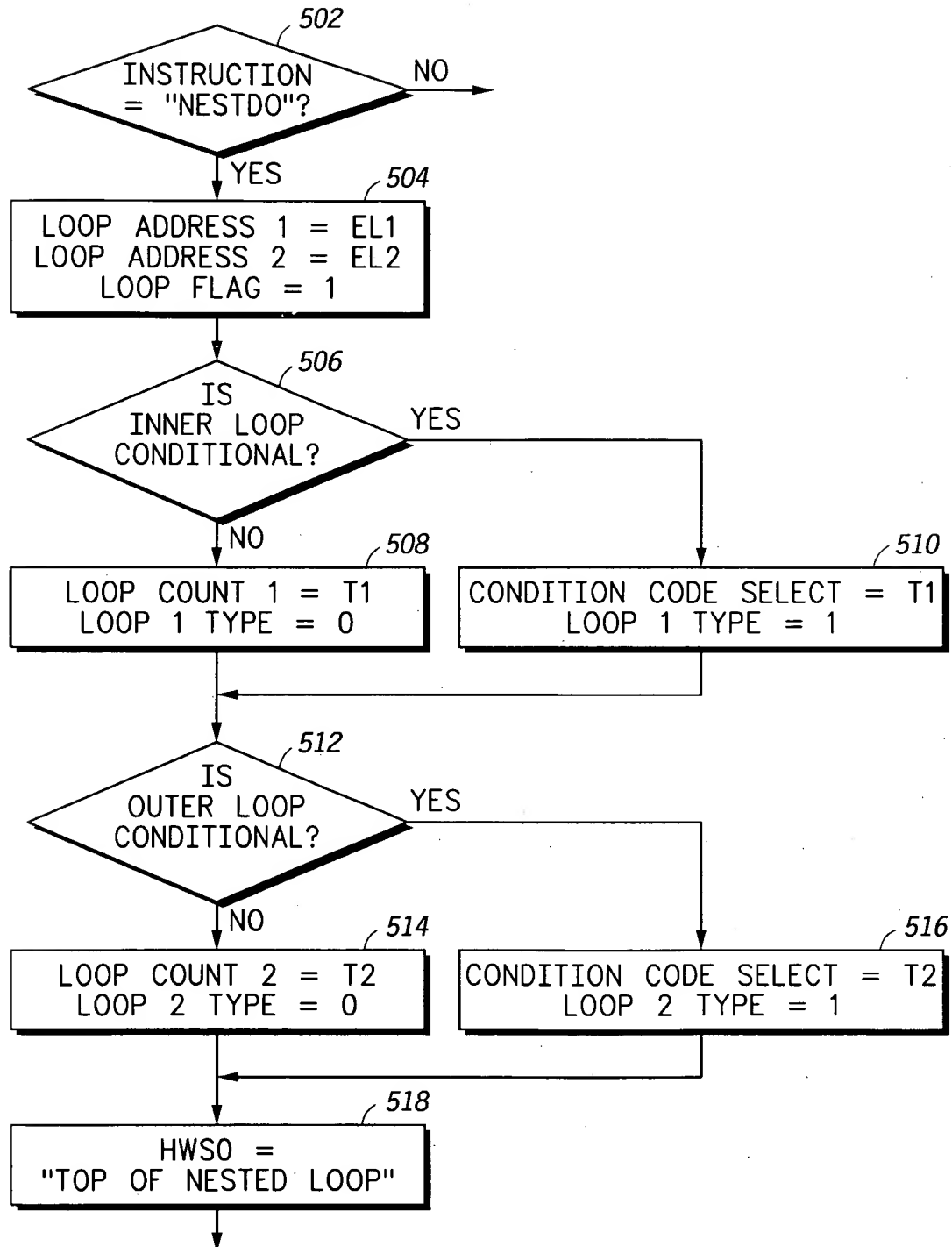


FIG. 5

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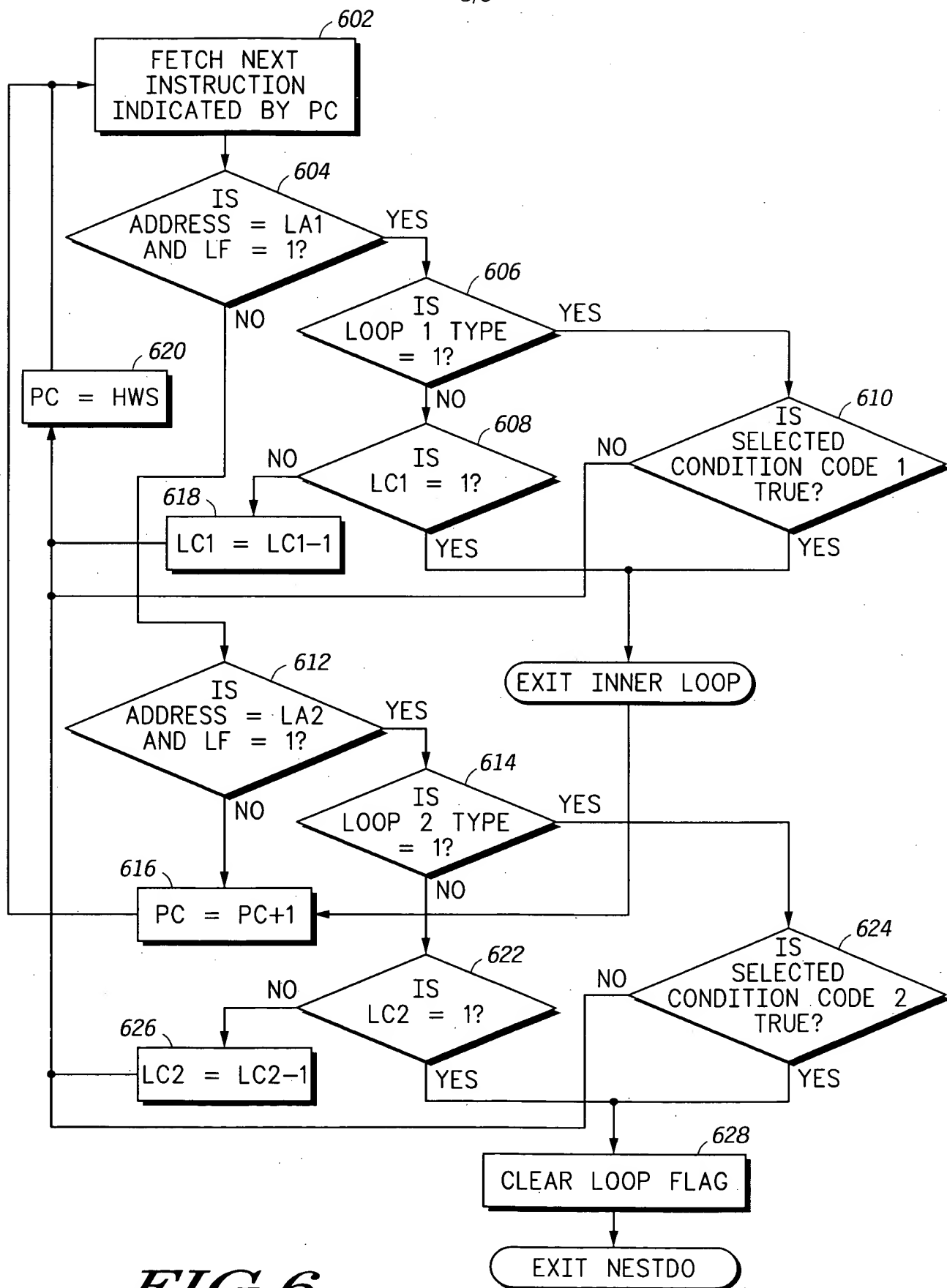


FIG. 6

SINGLE LOOP WITH MULTIPLE
TERMINATION CONDITIONS

700 → NESTDO ⁷⁰²EQ, ⁷⁰⁴#4, LBL
[
ASL A
MPY X0, Y0, A
CMP #74, A
LBL

FIG. 7

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